

REMARKS

Reconsideration of this application is respectfully requested.

The third paragraph, page 17 has been amended to correct minor editorial problems.

The Abstract has been amended to overcome the rejection under 35 U.S.C. § 112, first paragraph.

Claims 12, 13, and 22 have been amended to overcome the rejections under 35 U.S.C. § 112, second paragraph.

Claim 14 has been canceled to overcome the rejection under 35 U.S.C. § 112, second paragraph and the Double Patenting rejection under 35 U.S.C. § 101.

Claims 12-29 were variously rejected under 35 U.S.C. §§ 102 or 103 over Deshpande (U.S./6,512,266 B1)

Claim 14 is canceled. Claims 12, 13, 21 and 22 are amended. Claims 30-40 are added. Support for the amendments to claims 12 and 22 is in paragraphs from the second paragraph, page 8, to the first paragraph, page 11; the third paragraph, page 12; and the third paragraph, page 16. Support for claim 30 is provided in the third paragraph, page 16. Support for claim 31 is provided in paragraphs from the second paragraph, page 8, to the first paragraph, page 11; the third paragraph, page 12; and the first paragraph, page 14. Support for claims 32-38 is provided in the first paragraph, page 16. Support for claim 39 is provided in the first paragraph, page 18. Support for claim 40 is provided in the first paragraph, page 14.

Claim 12 is amended to require “applying a nitride plasma treatment ..., creating a layer of silicon oxy-nitride overlying exposed surfaces of said gate electrode structure and said first and second surfaces of said layer of liner oxide.” Deshpande merely discloses forming a divot fill material by a conformal deposition process. Deshpande fails to disclose or to suggest performing a nitride plasma treatment to the exposed surface of the liner oxide. Therefore, amended claim 12 should be patentable over the prior art of record. Claims 13, 15-20 are dependent on claim 12, and should be patentable for at least the same reasons.

Claim 22 is amended to further require “removing said layer of silicon oxy-nitride substantially without forming undercuts under said gate spacers.” Deshpande discloses a method forming divot regions, i.e. undercut, under the gate spacers, lines 42-45, column 6. By this statement, Deshpande fails to either teach or suggest how to remove the oxy-nitride layer substantially without forming undercuts under the gate spacers. By the disclosure, Deshpande further teaches away from the method of claim 22. Accordingly, amended claim 22 should be patentable over the prior art of record. Claims 23-30 are dependent on claim 22, and should be patentable for at least the same reasons.

Claim 31 is newly added and requires “removing said layer of silicon oxy-nitride substantially without forming divots on the liner oxides. Deshpande discloses a method to create divot regions 28 on the L-shaped structure 23 according to FIG. 1D of U.S. Pat. No. 6,512,266. Deshpande fails to either teach or suggest how to avoid forming divots on the liner oxides. In order to form the divot regions, Deshpande further teaches away from the method of claim 31. Therefore, added claim 31 should be patentable over the prior art of record. Claims 32-40 are dependent on claim 31, and should be patentable for at least the same reasons.

In view of the foregoing amendments and remarks, Applicant submits that this application is in condition for allowance. Early notification to that effect is respectfully requested.

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Amdt. dated June 18, 2004
Reply to Office action of March 19, 2004

The Assistant Commissioner for Patents is hereby authorized to charge any additional fees or credit any excess payment that may be associated with this communication to deposit account 04-1679.

Respectfully submitted,

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